

Amendment to the Abstract:

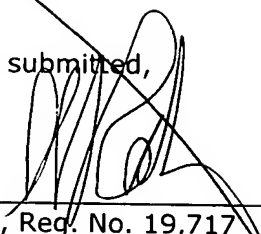
The Abstract has been amended. A revised Abstract is attached.

~~To provide a voltage-controlled oscillator capable of curbing degradation of a phase noise characteristic and keeping compliance of a control voltage unreduced, and a radio communication apparatus and a voltage-controlled oscillation method using the voltage-controlled oscillator.~~

The A voltage-controlled oscillator having an inductor circuit, n pieces (n is two or more) of variable capacitance circuit having variable capacitance elements, negative resistance circuits, and reference voltage generation means of generating a reference voltage from a power supply voltage, and wherein a predetermined reference voltage is inputted to some terminals of the variable capacitance elements of the n pieces of variable capacitance circuit, a control voltage is inputted to the other terminals thereof, and of the variable capacitance elements of the n pieces of variable capacitance circuits, the predetermined reference voltage inputted to some terminals of the variable capacitance elements of at least two pieces of the variable capacitance circuit is different.

Attachment

Respectfully submitted,


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Attachment: Abstract

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Kathleen Libby

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ABSTRACT

A voltage-controlled oscillator having an inductor circuit, n pieces (n is two or more) of variable capacitance circuit having variable capacitance elements, negative resistance circuits, and reference voltage generation means of generating a reference voltage from a power supply voltage, and wherein a predetermined reference voltage is inputted to some terminals of the variable capacitance elements of the n pieces of variable capacitance circuit, a control voltage is inputted to the other terminals thereof, and of the variable capacitance elements of the n pieces of variable capacitance circuits, the predetermined reference voltage inputted to some terminals of the variable capacitance elements of at least two pieces of the variable capacitance circuit is different.